

Patent claims

1 1. A door closer including a drive and a
2 housing (1), in which a shaft (2) is supported for the
3 connection to a door or the like, the shaft (2) being charged
4 by a brake piston (4) supported within the housing (1) and the
5 shaft being lockable in at least one position by means of a
6 spring-loaded blocking member (13), and in that the spring
7 (15) loading the blocking member (13) extends orthogonally
8 from the housing (1) and in that a pump (11) and a drive
9 motor (22) are disposed in the space formed between the
10 housing (1) and the spring (15).

1 2. A door closer including a drive and a
2 housing (1), in which a shaft (2) is supported for the
3 connection to a door or the like, the shaft (2) being charged
4 by a brake piston (4) supported within the housing (1) and the
5 shaft being lockable in at least one position by means of a
6 spring-loaded blocking member (13), and in that the spring
7 (15) loading the blocking member (13) extends orthogonally
8 from the housing (1) and in that a drive motor (22) is disposed
9 in the space formed between the housing (1) and the spring
10 (15).

1 3 A door closer according to claim 1 or 2,
2 characterized in that the spring (15) is supported within a

3 preferably tube-shaped bushing (12) extending orthogonally
4 from the housing (1) and being interchangeably connected to
5 the housing (1).

1 4. A door closer according to the preceding
2 claims, characterized in that the pump (11) and the drive
3 motor (22) are accommodated in a casing (10), which is
4 detachably mounted at the housing (1), respectively at the
5 tube-shaped bushing (12).

1 5. A door closer according to the preceding
2 claims, characterized in that the drive motor (22) is
3 accommodated in a casing (10), which is detachably mounted
4 at the housing (1), respectively at the tube-shaped bushing
5 (12).

1 6. A door closer according to the preceding
2 claims, characterized in that the blocking member (13)
3 presents a cup-shaped insert (14), which is displaceably
4 supported within the tube-shaped bushing (12).

1 7. A door closer according to the preceding
2 claims, characterized in that a support (16) protrudes from the
3 bottom of the cup-shaped insert (14) into the housing (1) and
4 carries a roller (17) at one end, which roller cooperates with
5 the shaft (2).

1 8. A door closer according to the preceding
2 claims, characterized in that the cup-shaped insert (14) is
3 loaded by a spring (15) into the direction of the housing (1),
4 which spring is disposed in the bushing (12).

1 9. A door closer according to the preceding
2 claims, characterized in that a friction reducing and/or wear
3 reducing coating or insert (19) is provided between the
4 bushing (12) and the cup-shaped insert (14).

1 10. A door closer according to the preceding
2 claims, characterized in that the brake piston (4) is charged by
3 means of a spring (6) into the direction of the eccentric disc
4 (3).

1 11. A door closer according to the preceding
2 claims, characterized in that a seal (7) is provided between
3 the walling of the housing (1) and the brake piston (4).

1 12. A door closer according to the preceding
2 claims, characterized in that the brake piston (4) is lockable
3 via a valve arrangement (8, 9) in a pre-determined position.

1 13. A door closer according to the preceding
2 claims, characterized in that the valve arrangement presents

3 a regulating valve (8) and a shut-off valve (9) affecting the
4 flow of the regulating valve (8).

1 14. A door closer according to the preceding
2 claims, characterized in that the shut-off valve (9)
3 automatically opens at excess pressure.

1 15. A door closer according to the preceding
2 claims, characterized in that the shut-off valve (9) can be
3 electro-magnetically actuated.

1 16. A door closer according to the preceding
2 claims, characterized in that the brake piston (4) is provided
3 with a roller (5), which charges the eccentric disc (3) disposed
4 at the shaft (2).

1 17. A door closer according to the preceding
2 claims, characterized in that the brake piston (4) is in
3 communication with the shaft (2) via a rocker (20) and an
4 eccentric disc (21).